

### AMENDMENTS TO THE CLAIMS

1. (Previously presented) A recombinant polynucleotide encoding a polypeptide comprising the amino acid sequence (SEQ ID NO: 1):

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NLVATCLPVR ASLPHRLNML RGPGPGLLLL AVLCLGTAVP STGASKSKRQ AQQMVQPQSP  
VAVSQSKPGC YDNGKHYQIN QQWERTYLGN VLVCTCYGGS RGFNCESKPE AEETCFDKYT  
GNTYRVGDTY ERPKDSMIWD CTCIGAGRGR ISCTIANRCH EGGQSYKIGD TWRRPHETGG  
YMLECVCLGN GKGEWTCCKPI AEKCFDHAAG TSYVVGETWE KPYQGWMMD CTCLGEGSGR  
ITCTSRNRCN DQDTRTSYRI GDTWSKKDNR GNLLQCICTG NGRGEWK CER HTSVQTTSSG  
SGPFTDVRAA VYQPQPHQP PPYGHCVTDS GVVYSVGMQW LKTQGNKQML CTCLGNGVSC  
QETAVTQTYG GNSNGEPCVL PFTYNGRTFY SCTTEGRQDG HLWCSTTSNY EQDQKYSFCT  
DHTVLVQTQG GNSNGALCHF PFLYNNHNYT DCTSEGRRDN MKWCGTTQNY DADQKFGFCP  
MAAHEEICTT NEGVMYRIGD QWDKQHDMGH MMRCTCVGNG RGEWTCYAYS QLRDQCIVDD  
ITYNVNDTFH KRHEEGHMLN CTCFGQGRGR WKCDPVDQCQ DSETGTFYQI GDSWEKYVHG  
VRYQCYCYGR GIGEWHCQPL QTYPSSSGPV EVFITETPSQ PNSHPIQWNA PQPSHISKYI  
LRWRPVSIPP RNLGY
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or variants or fragments or derivatives or fusions thereof or fusions of said variants or fragments or derivatives.

2. (Previously presented) A polynucleotide according to Claim 1, encoding a polypeptide comprising the amino acid sequence shown in Figure 2 labeled pMSF1 $\alpha$  between positions 19 and 660 (SEQ ID NO: 36), or variants or fragments or derivatives or fusions thereof or fusions of said variants or fragments or derivatives.

3. (Previously presented) A polynucleotide according to Claim 1, which contains no introns.

4. (Previously presented) A polynucleotide according to Claim 1, comprising the polynucleotide whose sequence is shown in Figure 1 (SEQ ID NO: 2).

5. (Previously presented) A polynucleotide according to Claim 1, comprising the polynucleotide whose sequence is shown in Figure 1 between positions 57 and 1982 (SEQ ID NO: 41).

6. (Previously presented) A polynucleotide according to Claim 1, encoding a polypeptide which has migration stimulation factor activity.

7. (Previously presented) A replicable vector comprising a polynucleotide as defined in Claim 1.

8. (Previously presented) A host cell comprising a recombinant polynucleotide as defined in Claim 1 or a replicable vector comprising the polynucleotide.

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9. (Previously presented) A method of making a polypeptide having the amino acid sequence (SEQ ID NO: 1)

NLVATCLPVR	ASLPHRLNML	RGPGPGLLLLL	AVLCLGTAVP	STGASKSKRQ	AQQMVQPQSP
VAVSQSKPGC	YDNGKHYQIN	QQWERTYLGN	VLVCTCYGGS	RGFNCEKPE	AEETCFDKYT
GNTYRVGDTY	ERPKDSMIWD	CTCIGAGRGR	ISCTIANRCH	EGGQSYKIGD	TWRRPHETGG
YMLECVCLGN	GKGEWTCKPI	AEKCFDHAAG	TSYVVGATWE	KPYQGWMMD	CTCLGEGSGR
ITCTSRNRCN	DQDTRTSYRI	GDTWSKKDNR	GNLLQCICTG	NGRGEWKCE	HTSVQTTSSG
SGPFTDVRAA	VYQPQPHPQP	PPYGHCVTDS	GVVYSVGMQW	LKTQGNKQML	CTCLGNGVSC
QETAVTQTYG	GNSNGEPCVL	PFTYNGRTFY	SCTTEGRQDG	HLWCSTTSNY	EQDQKYSFCT
DHTVLVQTQG	GNSNGALCHF	PFTYNGRTFY	SCTTEGRQDG	HLWCSTTSNY	EQDQKYSFCT
MAAHEEICTT	NEGVMYRIGD	QWDKQHDMGH	MMRCTCVGNG	RGEWTCYAYS	QLRDQCIVDD
ITYNVNDTFH	KRHEEGHMLN	CTCFGQGRGR	WKCDPVDQCQ	DSETGTFYQI	GDSWEKYVHG
VRYQCYCYGR	GIGEWHCQPL	QTYPSSSGPV	EVFITETPSQ	PNSHPIQWNA	PQPSHISKYI
LRWRPVSIPP	RNLGY				

or variants or fragments or fusions or derivatives thereof, or fusions of said variants or fragments or derivatives, the method comprising culturing a host cell as defined in Claim 8 which expresses said variant or fragment or derivative or fusion and isolating said polypeptide or variant or fragment or derivative or fusion from said host cell culture.

10. (Previously presented) A polypeptide comprising the amino acids sequence (SEQ ID NO: 1)

NLVATCLPVR	ASLPHRLNML	RGPGPGLLLLL	AVLCLGTAVP	STGASKSKRQ	AWWMVQPQSP
VAVSQSKPGC	YDNGKHYQIN	QQWERTYLGN	VLVCTCYGGS	RGFNCEKPE	AEETCFDKYT
GNTYRVGDTY	ERPKDSMIWD	CTCIGAGRGR	ISCTIANRCH	EGGQSYKIGD	TWRRPHETGG
YMLECVCLGN	GKGEWTCKPI	AEKCFDHAAG	TSYVVGATWE	KPYQGWMMD	CTCLGEGSGR
ITCTSRNRCN	DQDTRTSYRI	GDTWSKKDNR	GNLLQCICTG	NGRGEWKCE	HTSVWTTSSG
SGPFTDVRAA	VYQPQPHPQP	PPYGHCVTDS	GVVYSVGMQW	LKTQGNKQML	CTCLGNGVSC
QETAVTQTYG	GNSNGEPCVL	PFTYNGRTFY	SCTTEGRQDG	HLWCSTTSNY	EQDQKYSFCT
DHTVLVQTQG	GNSNGALCHF	PFLYNNHNYT	DCTSEGRDNR	MKWCGTTQNY	DADQKFGFCP
MAAHEEICTT	NEGVMYRIGD	QWDKQHDMGH	MMRCTCVGNG	RGEWTCYAYS	QLRDQCIVDD
ITYNVNDTFH	KRHEEGHMLN	CTCFGQGRGR	WKCDPVDQCQ	DSETGTFYQI	GDSWEKYVHG
VRYQCYCYGR	GIGEWHCQPL	QTYPSSSGPV	EVFITETPSQ	PNSHPIQWNA	PQPSHISKYI
LRWRPVSIPP	RNLGY				

or variants or fragments or fusions or derivatives thereof or fusions of said variants or fragments or derivatives.

11. (Previously presented) A polypeptide according to Claim 10, comprising the amino acid sequence shown in Figure 2 labeled pMSF1 $\alpha$  between positions 19 and 660 (SEQ ID NO: 36), or variants or fragments or fusions thereof or fusions of said variants or fragments.

12. (Original) A polypeptide obtainable by the method of Claim 9.

13. (Previously presented) A polypeptide according to Claim 10, which has migration stimulating factor activity.

Claims 14-26 (Cancelled)

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27. (Currently amended) A molecule which is capable of, following immunization of an animal if appropriate, giving rise to antibodies which are reactive towards the polypeptide whose sequence is (SEQ ID NO: 1)

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NLVATCLPVR ASLPHRLNML RGP GPGLLLL AVLCLGTAVP STGASKSKRQ AQQMVQPQSP  
VAVSQSKPGC YDNGKHYQIN QQWERTYLGN VLVCTCYGGS RGFNCESKPE AEETCFDKYT  
GNTYRVGDTY ERPKDSMIWD CTCIGAGRGR ISCTIANRCH EGGQSYKIGD TWRRPHETGG  
YMLECVCLGN GKGEWTCKPI AEKCFDHAAG TSYVVGETWE KPYQGWMMD CTCLGEGSGR  
ITCTSRNRCN DQDTRTSYRI GDTWSKKDNR GNLLQICITG NGRGEWK CER HTSVQTTSSG  
SGPFTDVRAA VYQPQPHQP PPYGHCVTDS GVVYSVGMQW LKTQGNKQML CTCLNGVSC  
QETAVTQTYG GNSNGEPCVL PFTYNGRTFY SCTTEGRQDG HLWCSTTSNY EQDQKYSFCT  
DHTVLVQTQG GNSNGALCHF PELYNHNYT DCTSEGRRDN MKWCGTTQNY DADQKFGFCP  
MAAHEEICTT NEGVMYRIGD QWDKQHDMDH MMRCTCVGNG RGEWTCYAYS QLRDQCI VDD  
ITYNVNDTFH KRHEEGHMLN CTCFGQGRGR WKCDPVDQCQ DSETGTFYQI GDWWEKYVHG  
VRYQCYCYGR GIGEWHCQPL QTYPSSSGPV EVFITETPSQ PNSHPIQWNA PQPSHISKYI  
LRWRPVSIPP RNLGY
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or natural variants thereof and but not reactive towards fibronectin (SEC ID NO: 46 44).

28. (Cancelled)

29. (Previously presented) A molecule according to Claim 27 which is a peptide comprising any one of the sequences ISKYILRWRPVSIPPRNLGY (SEQ ID NO: 3) or QQWERTYLGNALVCTCYGGS (SEQ ID NO: 4) or PCVLPFTYNDRTDSTTSNIEQDQ (SEQ ID NO: 5) or TDHTVLVQTRGGNSNGALCH (SEQ ID NO: 35) or VGNGRGEWTCIAYSQLRDQCI (SEQ ID NO: 7) which are found in MSF.

Claims 30-35 (Cancelled)

36. (Withdrawn and currently amended) A method of diagnosing cancer, in a person the method comprising detecting in a sample from the person to be diagnosed the presence of a polypeptide according to Claim 10 ~~whose sequence is (SEQ ID NO: 1)~~

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NLVATCLPVR ASLPHRLNML RGP GPGLLLL AVLCLGTAVP STGASKSKRQ AQQMVQPQSP  
VAVSQSKPGC YDNGKHYQIN QQWERTYLGN VLVCTCYGGS RGFNCESKPE AEETCFDKYT  
GNTYRVGDTY ERPKDSMIWD CTCIGAGRGR ISCTIANRCH EGGQSYKIGD TWRRPHETGG  
YMLECVCLGN GKGEWTCKPI AEKCFDHAAG TSYVVGETWE KPYQGWMMD CTCLGEGSGR  
ITCTSRNRCN DQDTRTSYRI GDTWSKKDNR GNLLQICITG NGRGEWK CER HTSVQTTSSG  
SGPFTDVRAA VYQPQPHQP PPYGHCVTDS GVVYSVGMQW LKTQGNKQML CTCLNGVSC  
QETAVTQTYG GNSNGEPCVL PFTYNGRTFY SCTTEGRQDG HLWCSTTSNY EQDQKYSFCT  
DHTVLVQTQG GNSNGALCHF PELYNHNYT DCTSEGRRDN MKWCGTTQNY DADQKFGFCP  
MAAHEEICTT NEGVMYRIGD QWDKQHDMDH MMRCTCVGNG RGEWTCYAYS QLRDQCI VDD  
ITYNVNDTFH KRHEEGHMLN CTCFGQGRGR WKCDPVDQCQ DSETGTFYQI GDWWEKYVHG  
VRYQCYCYGR GIGEWHCQPL QTYPSSSGPV EVFITETPSQ PNSHPIQWNA PQPSHISKYI  
LRWRPVSIPP RNLGY
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~~or a natural variant thereof~~ using a reagent ~~which~~ that can distinguish said polypeptide from fibronectin (SEQ ID NO: 46 44).

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37. (Withdrawn and currently amended) A method of determining susceptibility to cancer the method comprising detecting in a sample derived from the person to be tested the presence of a polypeptide according to Claim 10 whose sequence is (SEQ ID NO: 1)

NLVATCLPVR ASLPHRLNML RGPGLLLLL AVLCLGTAVP STGASKSKRQ AQQMVQPQSP  
VAVSQSKPGC YDNGKHYQIN QWERTYLG N VLVCTCYGGS RGFNCESKPE AEETCFDKYT  
GNTYRVGDTY ERPKDSMIWD CTCIGAGRGR ISCTIANRCH EGGQSYKIGD TWRRPHETGG  
YMLECVCLGN GKGEWTC KPI AEKCFDHAAG TSYVVGETWE KPYQGWMMD CTCLGEGSSR  
ITCTSRNRN DQDTRTSYRI GDTWSKKDN R GNLLQCICTG NGRGEWK CER HTSVQTTSSG  
SGPFTDVRAA VYQPQHPQP PPYGHCVTDS GVYVSGMQW LKTQGNKQML CTCLNGVSC  
QETAVTQTYG GNSNGEPCVL PFTYNGRTFY SCTTEGRQDG HLWCSTTSNY EQDQKYSFCT  
DHTVLVQTQC GNSNGALCHF PFLYNNHNYT DCTSEGRRDN MKWCGTTQNY DATQKFGFCP  
MAAHEEICTT NEGVMYRIGD QWDKQHD MGH MMRCTCVGNG RGEWTCYAYS QLRDQCIVDD  
ITYNVNDTFH KRHEEGHMLN CTCFGQGRGR WKCDPVDQCQ DSETGTFYQI GDSWEKYVHG  
VRYQCYCYGR GIGEWHCQPL QTYPSSSGPV EVFITETPSQ PNSHPIQWNA PQPSHISKYI  
LRWRPVSIPP RNLCY

~~or a natural variant or fragment thereof using a reagent which that~~ can distinguish said polypeptide from fibronectin (SEQ ID NO: 46 44).

38. (Withdrawn and currently amended) A method of determining the likely outcome of a patient with cancer the method comprising detecting in a sample from the patient the presence of polypeptide according to Claim 10 whose sequence is (SEQ ID NO: 1)

NLVATCLPVR ASLPHRLNML RGPGLLLLL AVLCLGTAVP STGASKSKRQ AQQMVQPQSP  
VAVSQSKPGC YDNGKHYQIN QWERTYLG N VLVCTCYGGS RGFNCESKPE AEETCFDKYT  
GNTYRVGDTY ERPKDSMIWD CTCIGAGRGR ISCTIANRCH EGGQSYKIGD TWRRPHETGG  
YMLECVCLGN GKGEWTC KPI AEKCFDHAAG TSYVVGETWE KPYQGWMMD CTCLGEGSSR  
ITCTSRNRN DQDTRTSYRI GDTWSKKDN R GNLLQCICTG NGRGEWK CER HTSVQTTSSG  
SGPFTDVRAA VYQPQHPQP PPYGHCVTDS GVYVSGMQW LKTQGNKQML CTCLNGVSC  
QETAVTQTYG GNSNGEPCVL PFTYNGRTFY SCTTEGRQDG HLWCSTTSNY EQDQKYSFCT  
DHTVLVQTQC GNSNGALCHF PFLYNNHNYT DCTSEGRRDN MKWCGTTQNY DATQKFGFCP  
MAAHEEICTT NEGVMYRIGD QWDKQHD MGH MMRCTCVGNG RGEWTCYAYS QLRDQCIVDD  
ITYNVNDTFH KRHEEGHMLN CTCFGQGRGR WKCDPVDQCQ DSETGTFYQI GDSWEKYVHG  
VRYQCYCYGR GIGEWHCQPL QTYPSSSGPV EVFITETPSQ PNSHPIQWNA PQPSHISKYI  
LRWRPVSIPP RNLCY

~~or a natural variant or fragment thereof using a reagent which that~~ can distinguish said polypeptide from fibronectin (SEQ ID NO: 46 44).

39. (Withdrawn and currently amended) A method according to any one of Claims 36 to 38, wherein the reagent which can distinguish said polypeptide from fibronectin is an antibody ~~according to any one of Claims 14-17.~~

40. (Withdrawn and currently amended) A method of diagnosing cancer the method comprising detecting in a sample from the person to be diagnosed a polynucleotide encoding a polypeptide according to Claim 10 whose sequence is (SEQ ID NO: 1)

NLVATCLPVR ASLPHRLNML RGPGLLLLL AVLCLGTAVP STGASKSKRQ AQQMVQPQSP  
VAVSQSKPGC YDNGKHYQIN QWERTYLG N VLVCTCYGGS RGFNCESKPE AEETCFDKYT

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GNTYRVGDTY ERPKDSMIWD CTCIGAGRGR ISCTIANRCH EGGQSYKIGD TWRRPHETGG  
YMLECVCLGN GKGEWTCKPI AEKCFDHAAG TSYVVGETWE KPYQCWMMVD CTCLGEGSGR  
ITCTSRNRN DQDTRTSYRI GDTWSKKDNR GNLLQCICIG NRGGEWKCEER HTSVQTTSSG  
SGPFTDVRAA VYQPQPHQP PPYGHCVTDS GVVSVMQW LKTQGNKQML CTCLGNGVSC  
QETAVTQTYG GNSNGEPCVL PFTYNGRTFY SCTTEGRQDG HLWCSTTSNY EQDQKYSFCT  
DHTVLVQTOG GNSNGALCHF PFLYNNHNYT DCTSEGRDND MKWCGTTQNY DADQKFGFCP  
MAAHEEICTT NEGVMYRIGD QWDKQHDMDH MMRCTCVGNG RGEWTCYAYS QLRDQCIVDD  
ITYNVNDTFH KRHEEGHMLN CTCFCQGRGR WKCDPVDQCQ DSETGTFYQI GDSWEKYVHG  
VRYQCICYGR GIGEWHCQPL QTYPSSSGPV EVFITETPSQ PNSHPIQWNA PQPSHISKYI  
LRWRPVSIPP RNLCY

or a natural variant thereof using a reagent which that can distinguish said polynucleotide from a polynucleotide encoding fibronectin (SEQ ID NO: 46 44).

41. (Withdrawn and currently amended) A method of determining susceptibility to cancer the method comprising detecting in a sample derived from the person to be tested the presence of a polynucleotide according to Claim 10 ~~encoding a polypeptide whose sequence is~~ (SEQ ID NO: 1)

NLVATCLPVR ASLPHRLNML RGPGLLLLL AVLCIGTAVP STGASKSKRQ AQQMVQPQSP  
VAVSQSKPGC YDNGKHYQIN QWERTYLG N VLVCTCYGGS RGFNCESKPE AEETCFDKYT  
GNTYRVGDTY ERPKDSMIWD CTCIGAGRGR ISCTIANRCH EGGQSYKIGD TWRRPHETGG  
YMLECVCLGN GKGEWTCKPI AEKCFDHAAG TSYVVGETWE KPYQCWMMVD CTCLGEGSGR  
ITCTSRNRN DQDTRTSYRI GDTWSKKDNR GNLLQCICIG NRGGEWKCEER HTSVQTTSSG  
SGPFTDVRAA VYQPQPHQP PPYGHCVTDS GVVSVMQW LKTQGNKQML CTCLGNGVSC  
QETAVTQTYG GNSNGEPCVL PFTYNGRTFY SCTTEGRQDG HLWCSTTSNY EQDQKYSFCT  
DHTVLVQTOG GNSNGALCHF PFLYNNHNYT DCTSEGRDND MKWCGTTQNY DADQKFGFCP  
MAAHEEICTT NEGVMYRIGD QWDKQHDMDH MMRCTCVGNG RGEWTCYAYS QLRDQCIVDD  
ITYNVNDTFH KRHEEGHMLN CTCFCQGRGR WKCDPVDQCQ DSETGTFYQI GDSWEKYVHG  
VRYQCICYGR GIGEWHCQPL QTYPSSSGPV EVFITETPSQ PNSHPIQWNA PQPSHISKYI  
LRWRPVSIPP RNLCY

or a natural variant thereof using a reagent which that can distinguish said polynucleotide from a polynucleotide encoding fibronectin (SEQ ID NO: 46 44).

42. (Withdrawn and currently amended) A method of determining the likely outcome of a patient with cancer the method comprising detecting in a sample from a patient the presence of a polynucleotide encoding a polypeptide according to Claim 10 ~~whose sequence is~~ (SEQ ID NO: 1)

NLVATCLPVR ASLPHRLNML RGPGLLLLL AVLCIGTAVP STGASKSKRQ AQQMVQPQSP  
VAVSQSKPGC YDNGKHYQIN QWERTYLG N VLVCTCYGGS RGFNCESKPE AEETCFDKYT  
GNTYRVGDTY ERPKDSMIWD CTCIGAGRGR ISCTIANRCH EGGQSYKIGD TWRRPHETGG  
YMLECVCLGN GKGEWTCKPI AEKCFDHAAG TSYVVGETWE KPYQCWMMVD CTCLGEGSGR  
ITCTSRNRN DQDTRTSYRI GDTWSKKDNR GNLLQCICIG NRGGEWKCEER HTSVQTTSSG  
SGPFTDVRAA VYQPQPHQP PPYGHCVTDS GVVSVMQW LKTQGNKQML CTCLGNGVSC  
QETAVTQTYG GNSNGEPCVL PFTYNGRTFY SCTTEGRQDG HLWCSTTSNY EQDQKYSFCT  
DHTVLVQTOG GNSNGALCHF PFLYNNHNYT DCTSEGRDND MKWCGTTQNY DADQKFGFCP  
MAAHEEICTT NEGVMYRIGD QWDKQHDMDH MMRCTCVGNG RGEWTCYAYS QLRDQCIVDD  
ITYNVNDTFH KRHEEGHMLN CTCFCQGRGR WKCDPVDQCQ DSETGTFYQI GDSWEKYVHG  
VRYQCICYGR GIGEWHCQPL QTYPSSSGPV EVFITETPSQ PNSHPIQWNA PQPSHISKYI  
LRWRPVSIPP RNLCY

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~~or a natural variant or fragment thereof~~ using a reagent ~~which~~ that said polynucleotide from a polynucleotide encoding fibronectin (SEQ ID NO: ~~46~~ 44).

43. (Cancelled)

44. (Withdrawn) A method according to any one of Claims 36 to 38 and 40 to 42, wherein the cancer is breast cancer.

45. (Cancelled)

46. (Cancelled)

47. (Withdrawn) A method of modulating cell migration the method comprising administering an effective amount of a polypeptide according to any one of Claims 10 and 12 to the site where modulation of cell migration is required.

48. (Withdrawn) A method according to Claim 47, wherein the cell is a fibroblast or an endothelial cell.

49. (Withdrawn) A method according to Claim 47, wherein the site is in a mammalian body.

50. (Withdrawn) A method according to Claim 49, wherein the site is in a human body.

51. (Currently amended) A method for modulating cell migration at a site within a mammalian body comprising administering ~~Use of a polypeptide according to any one of Claims 10 and 12 to the site, in the manufacture of an agent for modulating cell migration.~~

52. (Cancelled)

53. (Withdrawn) A method of healing a wound the method comprising administering to the locality of the wound an effective amount of a polypeptide according to any one of Claims 10 and 12.

54. (Cancelled)

55. (Cancelled)

56. (Previously presented) A pharmaceutical composition comprising a polypeptide according to any one of Claims 10 and 12 and a pharmaceutically acceptable carrier.

57. (Previously presented) A polypeptide according to any one of Claims 10 and 12 for use in medicine.

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58. (Withdrawn) A method of preventing scarring comprising administering to the locality of the site where scarring is to be prevented an effective amount of polypeptide according to any one of Claims 10 and 12.

59. (Previously presented) A polypeptide according to Claim 12, which has migration stimulating factor activity.

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### **AMENDMENTS TO THE DRAWINGS**

Enclosed please find a clean copy of amended Figures 1 and 2 along with a copy showing red ink markings designating the proposed changes to the drawings in this application for which approval by the Examiner is requested. Figures 1 and 2 have been amended to add sequence identifiers. Accordingly, no new matter is being added herewith.